

No. 637,500.

Patented Nov. 21, 1899.

H. B. CAMP.
TANK.

(Application filed Mar. 13, 1899.)

(No Model.)

Fig. 1,

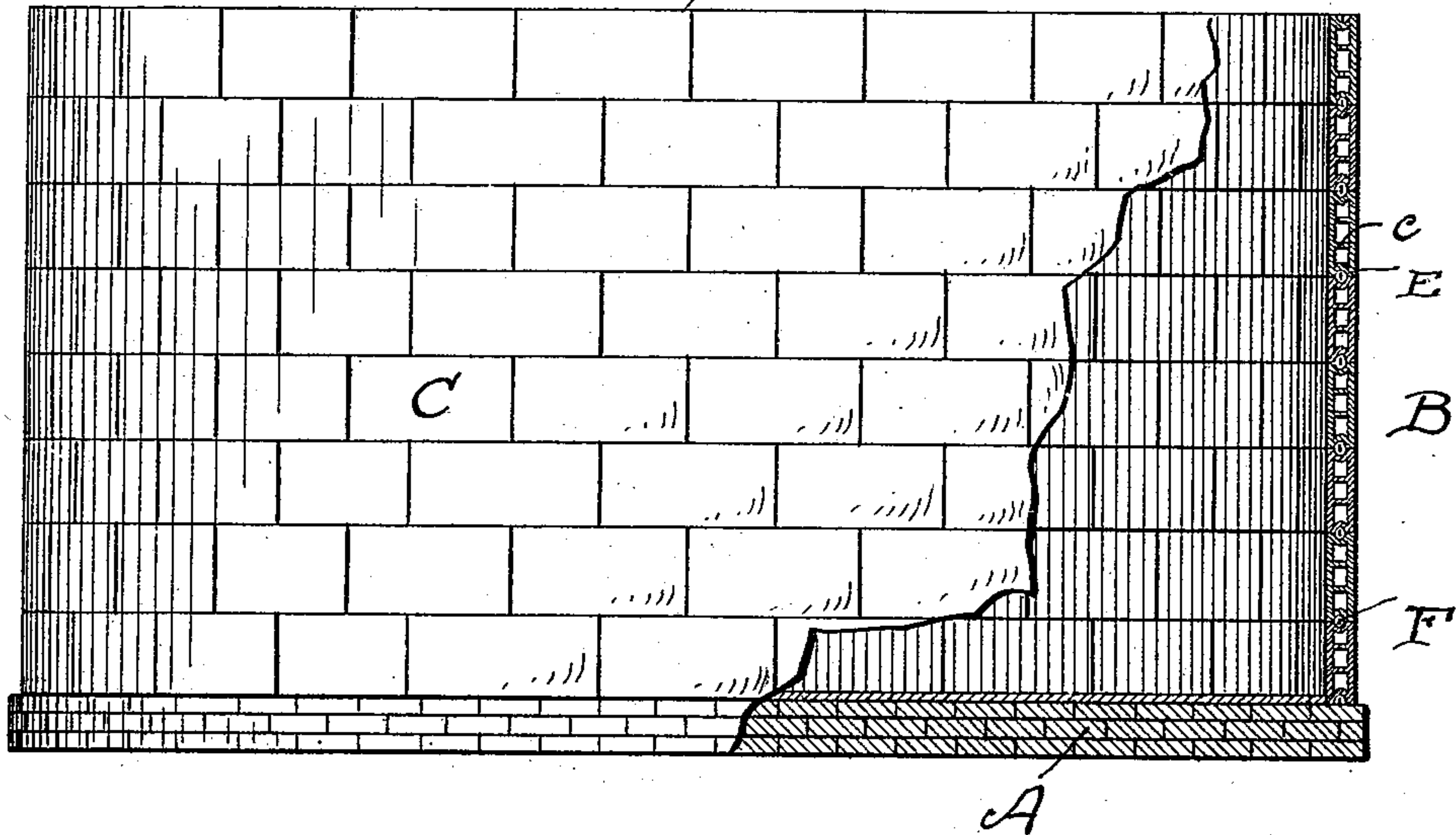


Fig. 2,

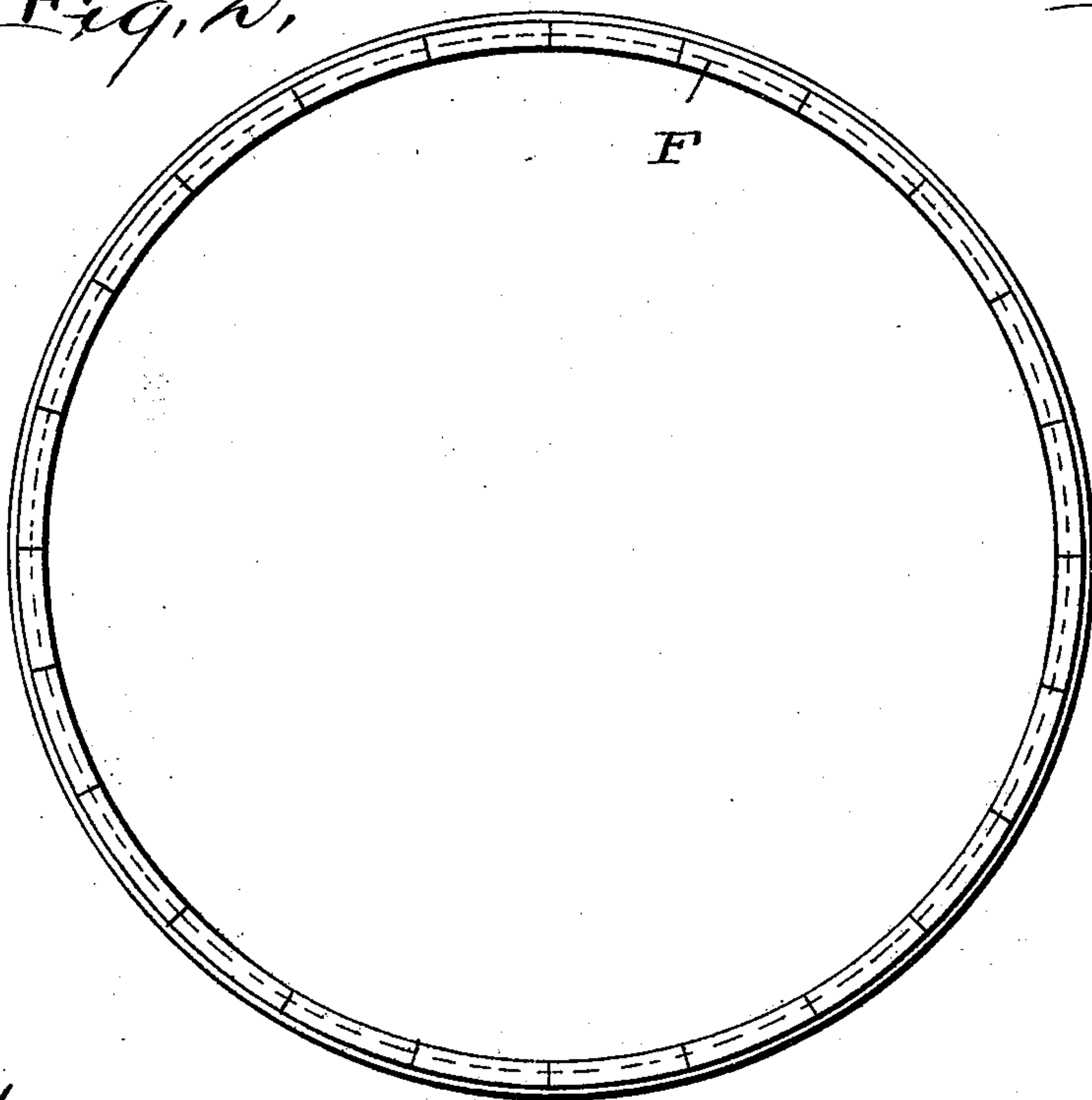
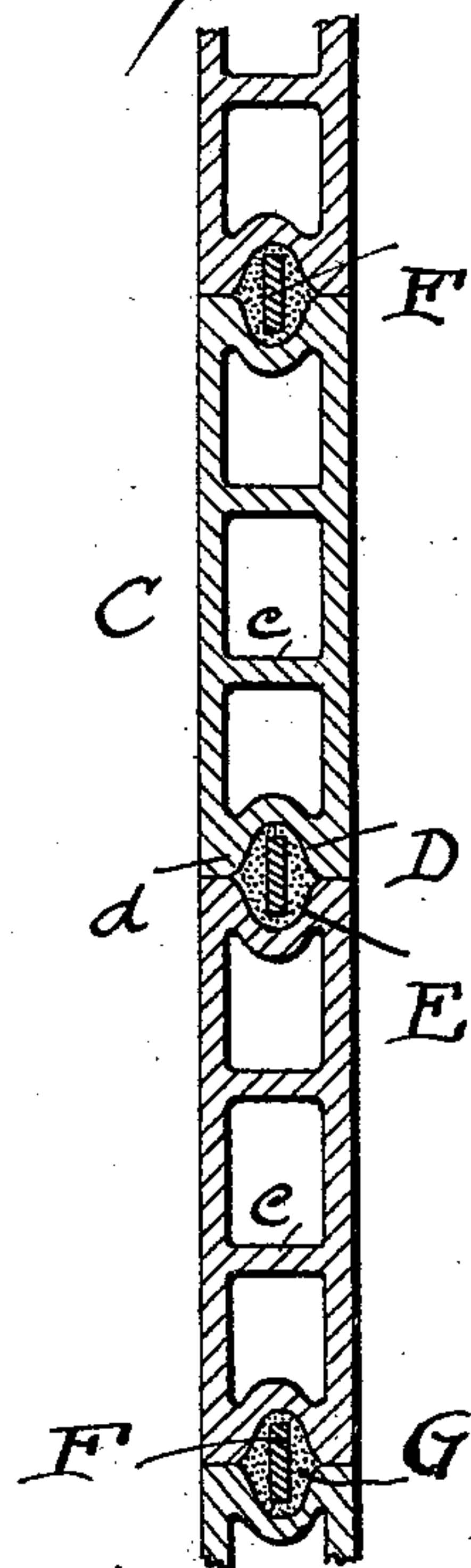


Fig. 3,



Witnesses.
E. B. Gilchrist
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by Amastine
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UNITED STATES PATENT OFFICE.

HORACE B. CAMP, OF AKRON, OHIO.

TANK.

SPECIFICATION forming part of Letters Patent No. 637,500, dated November 21, 1899.

Application filed March 13, 1899. Serial No. 708,853. (No model.)

To all whom it may concern:

Be it known that I, HORACE B. CAMP, a citizen of the United States of America, residing at Akron, Summit county, State of Ohio, have
5 invented certain new and useful Improvements in Tanks, of which the following is a specification.

The annexed drawings and the following description set forth in detail one mechanical
10 form embodying the invention, such detailed construction being but one of various mechanical forms in which the principle of the invention may be used.

In said annexed drawings, Figure I represents a side elevation of my improved tank,
15 partly in section; Fig. II, a plan view, and Fig. III a vertical section that is enlarged to more clearly disclose the construction.

The base A of my improved tank is constructed of brick covered with cement or in
20 any well-known manner that will make same impervious to water. The retaining-wall B is constructed of tile C, laid one upon the other in courses and arranged so as to break
25 joints. Said tile consist of any suitable material—such as earthenware, glass, porcelain, or terra-cotta—that can be made non-porous, and consequently water-tight, and are of any convenient section. Preferably they are
30 formed rectangular in section and are provided with reinforcing webs or flanges *c* between their sides. If the tank is circular in outline, the tile are curved slightly in order that their ends will register. The central
35 portion of the edges *d* of the tile are recessed or curved inward, forming a groove D. The grooves on the opposite edges are correspondingly shaped, so that when the tile are laid a cavity E is formed circumferentially of the
40 tank between each course. A metal band or hoop F, of light steel, iron, or other suitable metal, is set on its edge and inclosed within said cavity and is embedded in cement G, that completely fills the same. By placing the
45 band F upon its edge the binding quality is preserved and at the same time the variations of contraction and expansion are not so liable to impair the structure as when the bars are laid flat or when a round bar is employed. The
50 joints between the courses and the meeting

ends of the tile are hermetically sealed with cement.

In construction the base portion is first prepared and the lower course of tile is placed thereon. The hoop is placed within the circumferential groove provided in the top of
55 the course and sufficient cement is added to completely fill the cavity formed by laying the next course. The surplus cement, if any, is forced out between the tile and may be removed.
60

My improved tank can withstand much greater pressure than an ordinary tank of equal weight constructed with walls of brick or tile filled with cement. It is not affected
65 by changes in the temperature or by the action of the elements, and as it is constructed entirely of fireproof material it is almost indestructible from ordinary causes. The hoops are under no initial strain and only a slight
70 band is required in order to sufficiently reinforce the cement and afford perfect safety against the bursting of the tank. The hoops, being hermetically inclosed, are also preserved
75 against rust or accidental injuries and retain their tensile strength for an indefinite length of time. After the cement hardens and becomes set it forms a dowel or key between the courses, locking them together, and the adhesion between the cement and the tile practically changes the wall into a monolithic structure, thereby further increasing its strength and durability.
80

What I claim is—

A cistern or tank, comprising a foundation of built masonry, an impervious cement
85 bottom laid on the foundation, vertical walls composed of suitable tiling having registering grooves in their upper and lower meeting edges, cement laid in and filling said grooves,
90 and a thin metal band set edgewise and embedded in the cement, and extending around the structure, substantially as described.

In testimony whereof I sign this application, in the presence of two witnesses, this 28th day
95 of February, 1899.

HORACE B. CAMP.

Witnesses:

G. H. FASTER,

C. I. HENDERSON.